

INSTALLATION INSTRUCTIONS



SKYTRON I3 Washer-Disinfector

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Although current at the time of publication, SKYTRON'S policy of continuous development makes this manual subject to change without notice.

EQUIPMENT LABELS



MODEL CONFIGURATION

I3 Single Door Electric

 **SKYTRON®**

GRAND RAPIDS, MI • 1.616.656.2900

⚠

REFER TO ACCOMPANYING DOCUMENTS

⚠

ELECTRICAL RATING

MODEL NO.

I3

SERIAL NO.

DATE OF FABRICATION

ELECTRICAL RATING

208V

3Ph

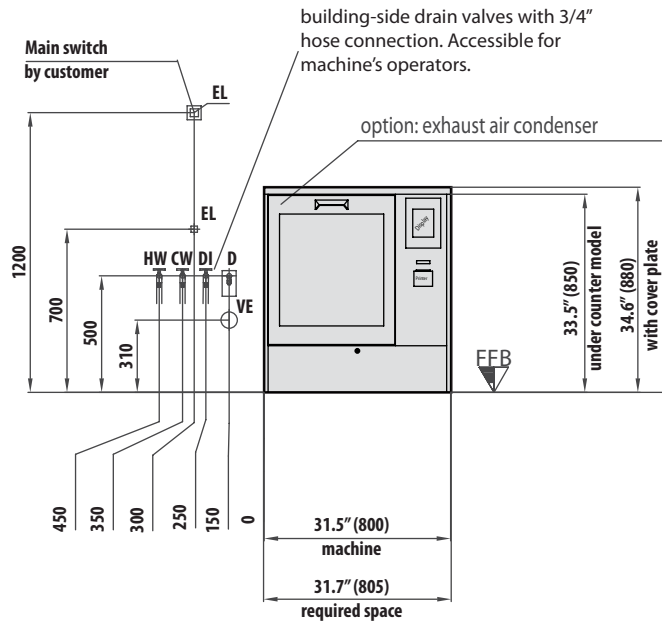
60Hz

11KW

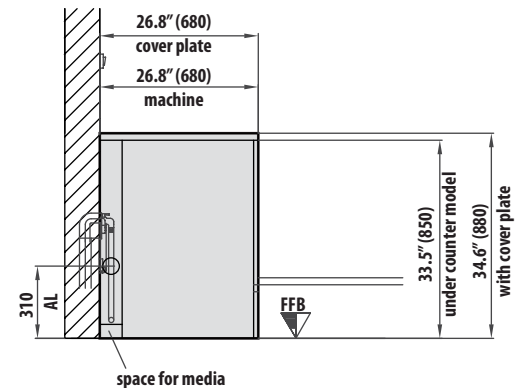
Manufactured for SKYTRON by BHT HYGIENETECHNIK, GERSTHOFEN, GERMANY

SERIAL NUMBER TAG
(reverse side of panel)

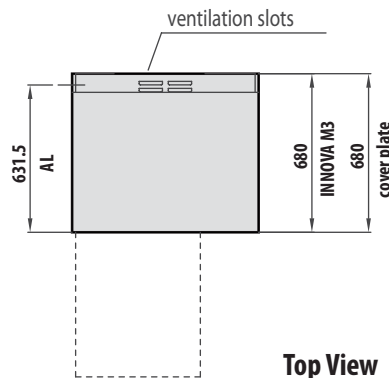
Front View



Side View



Top View



Heat loss: 1707 BTU/hr
Operating Weight: 331 lbs. (150 Kg)
Dimensions: 31.5"W x 26.8"D x 34.6"H (800 x 680 x 880 mm)
All measurements refer to finished floor and finished wall.

It is recommended that shut-off valves and vacuum breakers (by others) be installed on all service lines.
Flexible hoses provided for services connections.

Cold Water (CW) - 3/4" NPT
Flow pressure:: 29-75 PSI (2-5 bar)
Capacity : 5 gallons/min

Hot Water (HW) - 3/4" NPT
Temperature: 160°F
Flow pressure: 29-75 PSI (2-5 bar)
Capacity: 5 gallons/min
Consumption per cycle: 14.8 gal. (5.6L)

DI Water (DI) - 3/4" NPT
Flow pressure: 29-75 PSI (2-5 bar)
Capacity: 5 gallons/min
Consumption per cycle: 3.7 gal. (14L)

It is required that a three phase, fused Main Disconnect Switch (with lockout in OFF position; by others) be installed in electrical supply lines immediately near the equipment. Electrical connections must be installed according to NEC.

Electrical Connection (EL)
208VAC, 3Ph, LI + L2 + L3 + G
Electric dryer and sump: 35AMP, 11kW

Drain (D) - 3/4" NPT Machine Side Discharge.

Vent (VE) - Direct Connection not recommended (in-direct vent hood utilizing seamless non-corrosive vent materials recommended).

* Not applicable if I3-CON Exhaust Condenser is installed.

Unit to be used only in specified environmental conditions:
 Temperature: 5°- 40°C (41°- 104°F)
 Relative Humidity: 30% to 95% (non condensing moisture)

SECTION I TECHNICAL SPECIFICATIONS / CONNECTIONS**1-1. General Specifications**

Weight: 331 lbs. (150 Kg)
 Dimensions: 31.5"W x 26.8"D x 33.5"H
 (800x680x880)*

*All dimensions refer to finished floor and finished wall.

- Packaged Unit Dimensions & Weight

Size: 40"W x 30"D x 40"H
 Weight: 460 lbs.

- Package Contents

- Unit
- Drain Plumbing package
- Header Rack
- I-Series Performance Kit

For the connection of the SKYTRON I3 Washer-Disinfector to the facility water supply, all local/national regulations must be followed.

Install all the electrical connections in accordance with the NEC standards and local/national regulations.

1-2 Utility Connection Specifications

It is recommended that water shut-off valves and vacuum breakers (by others) be installed on all service lines. Flexible hoses are provided for service connections. Hoses extend approximately 5 feet from the back of the machine.

- Waterline connection color code:

Red: HW (hot water)
 Blue: CW (cold water)
 Yellow: DI (de-ionized water)

- Cold Water (CW)

- Connection: 3/4" NPT
- Flow pressure: 29-75 P.S.I. (2-5 bar)
- Capacity: 5 gal./min.

- Hot Water (HW)

- Connector: 3/4" NPT
- Flow pressure: 29-75 P.S.I. (2-5 bar)
- Capacity: 5 gal./min.

- De-Ionized Water (DI)

- Connector: 3/4" NPT
- Flow pressure: 29-75 P.S.I. (2-5 bar)
- Capacity: 5 gal./min.

NOTE

SKYTRON also recommends Reverse Osmosis (RO) water or water from a filtered source.

- Drain Service

The SKYTRON I3 Washer-Disinfector is supplied with a 3/4" diameter Drain Hose that extends six (6) feet from the back of the Washer.

- Capacity: 5 gal./min.

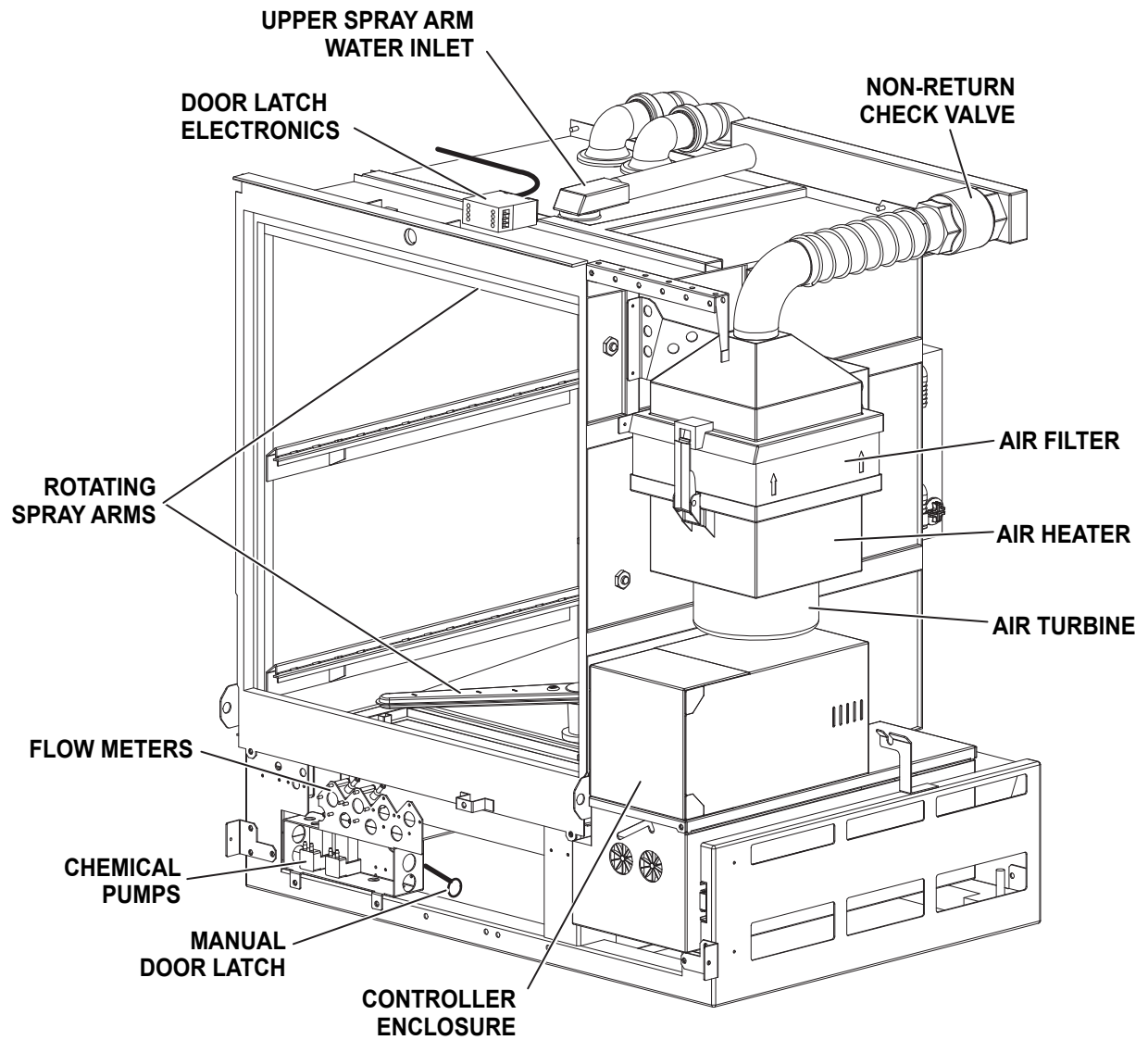
- Electrical Connection (EL)

208VAC, 3Ph, L1+L2+L3+G

- Power consumption

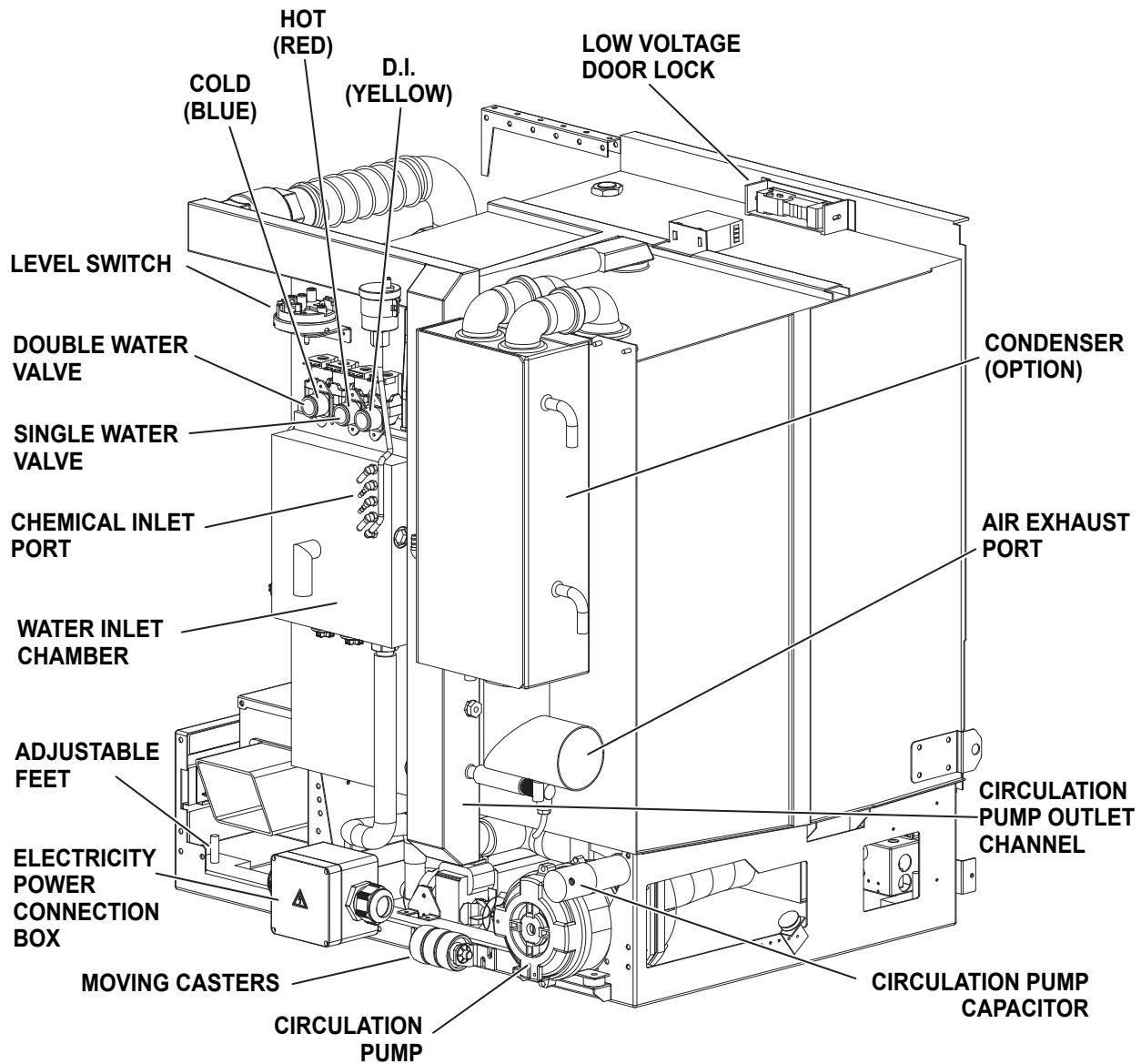
Electric dryer and sump: 35 Amp., 11KW

Washer Front Component / System Location



I3 FRONT COMPONENTS

Washer Rear Component / System Location



13 REAR COMPONENTS

1-3 Water Supply Connection Specification

The SKYTRON I3 Washer-Disinfector provides three (3) Reinforced Water Intake Lines (hot, cold, & DI) that extend five (5) feet from the back of the Washer.



CAUTION



Flush all in-house water supply pipes for a prolonged period of time before the unit is connected. This will protect the Washer from foreign particles penetrating into the unit. SKYTRON declines any responsibility for such damages to the Washer caused by contamination from the piping.

1-4 Electrical Connection Specifications

SKYTRON stipulates that the customer provide a 208VAC, three phase, fused, Main Disconnect Switch (with the lockout in the OFF position) near the SKYTRON I3 Washer-Disinfector. Electrical connections must be installed according to NEC standards, following local and state electrical codes.

This washer requires that electrical connections are made by a licensed electrician in accordance with state, local, and national electrical codes using UL (Underwriters Laboratory) recognized materials.

SPECIAL USER ATTENTION

The following precautions should be reviewed by all personnel prior to operating the SKYTRON I3 Washer-Disinfector.

**WARNING**

Indicates a possibility of personal injury.

**CAUTION**

Indicates a possibility of damage to equipment.

NOTE

Indicates important facts or helpful hints.

**CAUTION**

Flush all in-house water supply pipes for a prolonged period of time before the unit is connected. This will protect the Washer from foreign particles penetrating into the unit. SKYTRON declines any responsibility for such damages on the Washer caused by contamination from the piping.

**CAUTION**

Should any damage to the SKYTRON I3 Washer-Disinfector be noted while unpacking, further unpacking should be discontinued. The container, with all the wrapping, shall be held for inspection. The transportation company must be notified immediately so an inspector can be sent. Read the Damaged Shipment Claim Procedure for further details.

**WARNING**

Personnel unpacking the SKYTRON I3 Washer-Disinfector must use extreme caution when removing the machine from the package to prevent damage to the machine and injury to themselves or others.

**CAUTION**

Transport the SKYTRON I3 Washer-Disinfector using a forklift truck or pallet jack with appropriate lifting power and suitable forks.

**WARNING**

The negligence of the safety instructions may cause improper Washer performance or endanger operating personnel. Not following safety instruction may lead to the loss of warranty claims.

NOTE

The installation technician may be required to change the order of steps or modify the specifications of this installation procedure to meet the specific site installation requirements.

NOTE

Depending on the drain utilities provided at the installation location, the Drain Plumbing package has been provided to facilitate making the Washer drain connection into an existing sink drain. Follow the installation instructions on the Drain Plumbing package.

NOTE

Do not open the in-house water shut-off valves at this time.

**WARNING**

Be careful when working with cleaning and disinfection chemicals. Eyes, hands, and clothes must be protected. Wear safety glasses and gloves. Avoid contact of eyes and skin with chemicals!

**CAUTION**

Ensure only non-foaming detergents are used with the SKYTRON I3 Washer-Disinfector.

NOTE

The SKYTRON I3 Washer-Disinfector is supplied with two Chemical Siphon/Level Sensors, one for each of the two Chemical Pumps and Flow Meters. They are designed to exit through a knock-out hole in the back panel and connect to a Chemical Supply or Container next to the Washer. If alternative chemical connections are required, it is recommended to use SKYTRON Chemical Extension Hose (P.N. F3-040-99).

NOTE

Two additional Chemical Pumps may be added for a maximum of four Pumps per Washer.

NOTE

Follow procedures in the Section 4-5, Chemical Pump Calibration, to calibrate the Chemical Pump/Flow Meters.

**WARNING**

The connections of the SKYTRON I3 Washer-Disinfector to the Power Supply must be carried out only by skilled personnel. The applicable connection data must be considered.

**WARNING**

Connect the Washer according to the wiring diagram and ground in accordance with the local and state electrical code. Appropriate fuses and main switch will be installed by customer.

NOTE

Watch the pump shaft until it slows down to determine the direction of it's rotation. If it is not rotating in the correct direction, instruct the installation electrician to change the electrical connections to correct the phase problem.

NOTE

The I-Series Performance Kit (Part No.F3-050-00) shipped with the SKYTRON I3 Washer-Disinfector includes a five gallon container of Multi-Purpose Lube-Zyme Concentrate Solution. The manufacturer suggests a dilution ratio ranging from 1/4 ounce to 1 ounce per gallon.



WARNING



Calibration of the Chemical Pump/ Flow Meters shall only be carried out by a trained SKYTRON technician. Otherwise, the cleaning and disinfection is not ensured.



CAUTION



Always refer to the dilution rate indicated on the chemical label for correct calibration.

NOTE

The chemical pump hoses and associated components are empty and must be "primed" before the chemical pumps can be calibrated. Place Chemical Pump 1's Chemical Siphon/Level Sensor into a container of chemical and press the P16 - Rinsing Chemical System to initiate a 10 second pump cycle. Repeat this step by pressing the P16 two times until you observe chemical entering the Wash Chamber through the Water Input Port. Press the START key. The Chemical Pump 1 system is now primed.

NOTE

The cycle can be aborted by pressing the STOP key. The Control Panel Display will show:



WARNING



Avoid contact or inhalation of steam that escapes from the Wash Chamber. Severe burns may occur.

GENERAL SAFETY GUIDELINES

Installation instructions must be absolutely obeyed and implemented. The installation technician must pay attention to the following:

1. The installer must understand the instructions and be able to execute them.
2. The installer must follow the instructions strictly and carefully.
3. If necessary, or if required by regulations, use personal protection equipment.
4. Consider all the safety guidelines and hazard warnings of the machine!
5. Do not make any changes, alterations or attachment on the machine, without the approval of SKYTRON.
6. Only trained personnel from SKYTRON may implement program parameter alterations.

SECTION II PREPARATION

2-1 Preparatory Work

SKYTRON recommends a pre-installation strategy be developed to ensure the installation of the SKYTRON I3 Washer-Disinfector is as effortless and convenient as possible. Determine the kind and place of installation for the SKYTRON I3 Washer-Disinfector in advance. Prepare the required water/drain and electrical supplies in accordance with the connection plan.

2-2 Receiving

The SKYTRON I3 Washer-Disinfector is delivered in a suitable package. Please check the packing immediately after receiving for outwardly recognizable damages.

2-3 Unpacking

The SKYTRON I3 Washer-Disinfector is shipped in a wood crate mounted on a lift-truck accessible pallet. The packaged machine on the shipping pallet measures 40"W x 30"D x 40"H and weighs approximately 460 pounds. SKYTRON recommends that the machine is unpacked at the receiving dock.



CAUTION



Should any damage to the SKYTRON I3 Washer-Disinfector be noted while unpacking, further unpacking should be discontinued. The container, with all the wrapping, shall be held for inspection. The transportation company must be notified immediately so an inspector can be sent. Read the Damaged Shipment Claim Procedure for further details



WARNING



Personnel unpacking the SKYTRON I3 Washer-Disinfector must use caution when removing the machine from the crate to prevent damage to the machine and injury to themselves or others.

Included in the SKYTRON I3 Washer-Disinfector shipping crate is a package containing the Operation/ Installation Manual, I-Series Performance Kit (Part No. F3-050-00) and the Drain Plumbing Adaptors.

Step 1

Disassemble the wood crate and discard.

Step 2

Remove the bubble-wrap from the Washer and discard.

Step 3

Position the pallet jack forks so they are close to the side of the pallet.

Step 4

Adjust the height of the pallet jack so it is even with the top of the pallet.

Step 5

Carefully slide the Washer off the pallet until the Washer is centered on the pallet jack forks.

Step 6

Prepare to transport the Washer to the installation location.

2-4 Transportation Route

The SKYTRON I3 Washer-Disinfector measures 31.5"W x 26.8"D x 33.5"H and weighs 331 pounds. SKYTRON recommends that a transportation route from the receiving dock to the installation location be considered for height, width, and service elevator accessibility with the machine sitting on a pallet jack for transportation.



CAUTION



Transport the SKYTRON I3 Washer-Disinfector using a forklift truck or pallet jack with appropriate lifting power and suitable forks.



WARNING



The negligence of the safety instructions may cause improper Washer performance or endanger operating personnel. Not following safety instruction may lead to the loss of warranty claims.

SECTION III INSTALLATION

3-1. Washer/Drain Assembly Installation

NOTE

The installation technician may be required to change the order of steps or modify the specifications of this installation procedure to meet the specific site installation requirements.

Step 1

Carefully remove the Washer from the pallet jack and place partially into the installation location.

Step 2

Cut the tie-wrap at the back of the Washer securing the three water intake lines. Unwrap the lines.

Step 3

Cut the tie-wrap securing the 3/4" drain line.

Step 4

Remove the Drain Plumbing package from the Wash Chamber.

NOTE

Depending on the drain utilities provided at the installation location, the Drain Plumbing package has been provided to facilitate making the Washer drain connection into an existing sink drain. Follow the installation instructions on the Drain Plumbing package.

3-2. Water Supply Connections

Step 1

Remove the package containing (3) 3/4" NPT Adaptors (F1-010-65-1) and (1) Rubber Washer (F1-010-65-2) from the I-Series Performance Kit (Part No. F3-050-00)

Step 2

Locate the Water Supply Hose with the tie-wrap securing three Hose Fitting Washers. Cut the tie-wrap and collect the Washers.

Step 3

Place one (1) Hose Fitting Washer into each of the three Water Supply Hose Fittings.

Step 4

Secure one (1) 3/4" NPT Connection Adaptor to each of the Washers' three (3) Water Supply Hoses Fittings.

Step 5

Connect and firmly secure the three (3) Water Supply Hose Fittings to the in-house system observing the following color code:

Red:	HW (hot water)
Blue:	CW (cold water)
Yellow:	DI (de-ionized water)

NOTE

Do not open the in-house water shut-off valves at this time.

3-3. Chemical Supply Connections

Connect the unit according to the technical data (See SECTION I TECHNICAL SPECIFICATIONS / CONNECTIONS on page 4).



WARNING



Be careful when working with cleaning and disinfection chemicals. Eyes, hands, and clothes must be protected. Wear safety glasses and gloves. Avoid contact of eyes and skin with chemicals!



CAUTION



Ensure only non-foaming detergents are used with the SKYTRON I3 Washer-Disinfector.

NOTE

The SKYTRON I3 Washer-Disinfector is supplied with two Chemical Siphon/Level Sensors, one for each of the two Chemical Pumps and Flow Meters. They are designed to exit through a knock-out hole in the back panel and connect to a Chemical Supply or Container next to the Washer. If alternative chemical connections are required, it is recommended to use SKYTRON Chemical Extension Hose (P.N. F3-040-99).

NOTE

Two additional Chemical Pumps may be added for a maximum of four Pumps per Washer.

NOTE

Follow procedures in the Section 5-4, Chemical Pump Calibration, to calibrate the Chemical Pump/Flow Meters.

3-4. Electrical Supply Connections

SKYTRON stipulates that the customer provide a 208VAC, three phase, fused, Main Disconnect Switch (with the lockout in the OFF position) near the SKYTRON I3 Washer-Disinfector. Electrical connections must be installed according to NEC standards, following local and state electrical codes.



WARNING



The connections of the SKYTRON I3 Washer-Disinfector to the Power Supply must be carried out only by a certified electrician. The applicable connection data must be considered.



WARNING



Connect the Washer according to the wiring diagram and ground in accordance with the local and state electrical code. Appropriate fuses and main switch will be installed by customer.

Wire connection into fused disconnect box following local and state electrical code.

SECTION IV TEST AND CALIBRATION

4-1 Keypad Navigation

a. Entering Numeric Values

The SKYTRON I3 Washer-Disinfector's control panel features a dual purpose keypad. Its normal mode of operation is for entering program navigation commands as indicated by the symbols on the individual key pads. When the START key pad LED is blinking, the keypad is in the Numeric Keypad Mode. Numbers can now be entered following the keypad diagram shown below. Pressing the C4 key backspaces over entry errors. Pressing the ENTER key returns the keypad to its normal mode of operation.

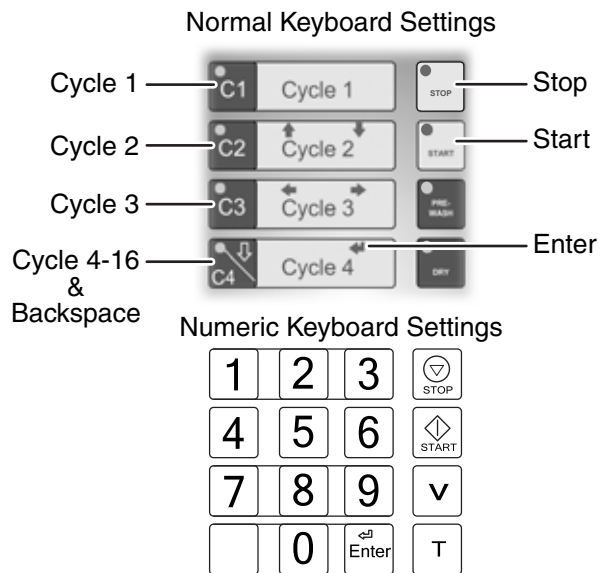


Figure 4-1.

b. Menu/Keypad Navigation

To aid the user in entering keypad navigation commands, all the available key pad options are illuminated by a LED. All other key pads will not function.

The UPARROW and DOWNARROW keys provide vertical movement into and out of submenu levels as shown below.

The RIGHT ARROW and LEFT ARROW keys provide horizontal movement through the submenus levels and each submenu's options. The user can verify the results of their keypad actions on the control panels two-line, 16-digit LCD alphanumeric display.

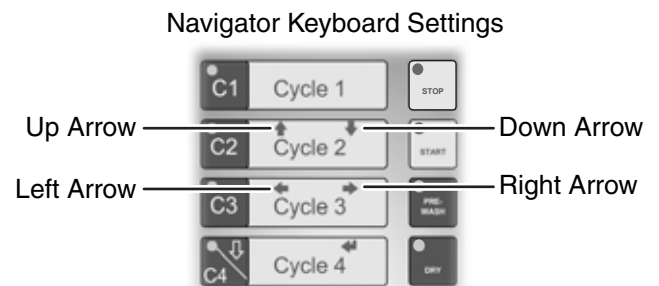


Figure 4-2.

4-2 Set Up

Step 1

Open the three (3) in-house water shut-off valves. Check for leaks and take appropriate action.

Step 2

Place the Electrical Main Disconnect Switch into the ON position. The washer will initiate a power up/self-diagnose routine and a sequence of messages will appear on the display window until it ends with the following message:

```
SKYTRON
I3
```

Step 3

Thoroughly inspect the Water Supply Line connections and Chemical Hoses for leaks.

Step 4

Press the STOP key.

```
select Program
P01 Instrument C
```

Step 5

Press the RIGHT ARROW key two times. The following messages will be displayed.

```
info level
submenu      v
```

```
service level
submenu      v
```

4-3 Special Service Level

To gain access to the SPECIAL SERVICE LEVEL one must enter a numeric access code. The procedure to obtain this code is specified in the I3 Service Manual. Follow the steps below to enter the SPECIAL SERVICE LEVEL.

Step 1

Press the **DOWN ARROW** key.

```
service level
000000
```

Step 2

Press the **START** key. The zero's will flash on and off.

```
service level
```

Step 3

Type the **Service Code** at the keypad. Press the **ENTER** key.

```
service level
XXXXXX
```

Step 4

Press the **DOWN ARROW** key.

```
special-service
submenu      v
```

Step 5

Press the **DOWN ARROW** key.

```
diagnose-level
submenu      v
```

4-4 Diagnose Submenu

In this submenu the output signals from the Programmable Logic Controller (PLC) can be tested. **Exercise caution** in this submenu. There are no limiters activated in this submenu. Improper handling may cause damage to the Washer.

Step 1

Press the DOWN ARROW key.

```
input status
submenu      v
```

Step 2

Press the RIGHT ARROW key.

```
output status
submenu      v
```

Step 3

Press the DOWN ARROW key.

```
CW valve
D02.01      OFF
```

Step 4

Press the RIGHT ARROW key until the Circulation Pump menu is displayed.

```
circ.PUMP
D02.05      OFF
```

Step 5

Press the START key quickly two times to turn the pump ON and then OFF.

```
circ.PUMP
D02.05      ON
```

```
circ.PUMP
D02.05      OFF
```

NOTE

Watch the pump shaft until it slows down to determine the direction of it's rotation. If it is not rotating in the correct direction, instruct the installation electrician to change the electrical connections to correct the phase problem.

Step 6

Press the RIGHT ARROW key until the Drain Pump menu is displayed.

```
drain PUMP
D02.06      OFF
```

Step 7

Verify this pump operation by pressing the START key quickly two times to turn the pump ON and then OFF.

Step 8

Press the RIGHT ARROW key until the Dryer Turbine 1 menu is displayed.

```
turb. dryin
D02.09      OFF
```

Step 9

Verify the operation of the Turbine Motor by pressing the START key quickly two times to turn the motor ON and then OFF.

Step 10

Press the RIGHT ARROW key until the Chemical Pump 1 menu is displayed.

```
dosine PUMP 1
D02.12      OFF
```

Step 11

Verify the operation of Chemical Pump 1 by pressing the START key quickly two times to turn the pump ON and then OFF.

Step 12

Press the RIGHT ARROW key until the Chemical Pump 2 menu is displayed.

```
dosine PUMP    2
D02.13        OFF
```

Step 13

Verify the operation of Chemical Pump 2 by pressing the START key quickly two times to turn the pump ON and then OFF.

Step 14

Press the UP ARROW key until the Diagnose Level Submenu is displayed.

```
diagnose-level
submenu        v
```

Step 15

Press the RIGHT ARROW key until the Basic Setting Submenu is displayed.

```
basic settings
submenu        v
```

Step 16

Press the DOWN ARROW key.

```
date/time
15.02.2008/19:49
```

Step 17

Press the RIGHT ARROW key three times.

```
dosine
settings
```

4-5 Chemical Pump Calibration

Chemical pump calibration is determined by the chemical/water dilution criteria for the particular chemical being used by the facility.

Since chemical/water dilution criteria varies among chemical manufacturers. You will need to adjust your calibration to meet the chemical criteria at your facility.

NOTE

The I-Series Performance Kit (P.N. F3-050-00) shipped with the SKYTRON I3 Washer-Disinfector includes a five gallon container of Multi-Purpose Lube-Zyme Concentrate Solution. The manufacturer suggests a dilution ratio ranging from 1/4 ounce to 1 ounce per gallon.



WARNING



Calibration of the Chemical Pump/ Flow Meters shall only be carried out by a trained SKYTRON technician. Otherwise, the cleaning and disinfection effect is not ensured.



CAUTION



Always refer to the dilution rate indicated on the chemical label for correct calibration.

A graduated vessel large enough to insert the Chemical Siphon/Level Sensor into is required. The ounces of liquid pumped per test cycle must be able to be measured accurately.

Step 1

Press the DOWN ARROW key.

```
dosine-Parameter
submenu        v
```

Step 2

Press the DOWN ARROW key.

```
dosine      1
type 1  temp= 60F
```

This is the default PARAMETER SETTING for chemical pump No. 1. Both TYPE (TYP) and TEMPERATURE (TEMP) can be edited.

TYP (0 or 1) is the method how the chemical is monitored as it is being dispensed.

Type 0 = Monitored per time

Type 1 = monitored by the flow meter

TEMP is the temperature that the water must be when the chemical is dispensed. This information is found on the chemical data sheet.

We want the accuracy of the flow meters so **TYP 1** will not be edited. The TEMP will be changed to 70° F.

Step 3

Press the START ARROW key. The "60" will blink ON and OFF.

```
dosine      1
type 1  temp=  F
```

Step 4

Enter the sequence of "0, 7, 0" on the keypad.

Press the ENTER key. The "1" will blink ON and OFF.

```
dosine      1
type      temp= 70F
```

Step 5

Press the START key.

```
dosine      1
type 1  temp= 70F
```

Step 6

Press the UP ARROW key.

```
dosine-Parameter
submenu      v
```

Step 7

Press the RIGHT ARROW key.

```
dos.  calibr.
submenu      v
```

Step 8

Press the DOWN ARROW key.

```
dosine      1
t 10 0353  2.40oz
```

This is the default CHEMICAL (DOSING) SETTING for chemical pump No. 1. Both TIME (T) and FLUID OUNCE (2.40fl oz.) can be edited.

T (time) is the time in seconds the chemical pump is on.

The number shown between "time" and "fl oz" is the total counts the Flow Meter's electro/mechanical counter sends during the chemical pump's ON TIME.

fl 0.00oz is for reference only. It's value does not effect calibration. It is only entered to record the amount of chemical dispensed.

NOTE

The chemical pump hoses and associated components are empty and must be "primed" before the chemical pumps can be calibrated. Place Chemical Pump 1's Chemical Siphon/Level Sensor into a container of chemical and press the P16 - Rinsing Chemical System to initiate a 10 second pump cycle. Repeat this step by pressing the P16 two times until you observe chemical entering the Wash Chamber through the Water Input Port. Press the START key. The Chemical Pump 1 system is now primed.

Step 9

Fill the graduated vessel with enough chemical to have a clear initial reading.

Step 10

Insert Chemical Pump 1's Chemical Siphon/Level Sensor into the graduated vessel filled with chemical.

Step 11

Press the START key. The "10" will blink ON and OFF.

```
dosine  1
t      0353  2.40oz
```

Step 12

Press the ENTER key. The "2.40" will blink ON and OFF. The Time will begin to count down from 10 and the Counter will begin to count up from 0.

```
dosine  1
t 10 0000      oz
```

Wait for the 10 second pump cycle to end.

Step 13

Remove the Chemical Siphon/Level Sensor from the graduated vessel.

View where the chemical line is on the graduated scale. Subtract this level from the original level. This will be the amount of chemical pumped in 10 seconds.

EXAMPLE: If 1.2 ounces was pumped in 10 seconds and the goal is 2.5 ounces, then one could calculate ($2.5 \div 1.2 = 2.08$) that 2.08 more time (21 seconds total) is required to pump 2.5 ounces ($2.08 \times 1.2 = 2.5$).

Step 14

Place enough chemical in the graduated vessel to return to the original level. Place the Chemical Siphon/Level Sensor into the graduated vessel.

Step 15

Press the START key two times.
Enter the number sequence "2, 1".
Press the ENTER key.

The "2.40" will blink ON and OFF. The Time will begin to count down from 21 and the Counter will begin to count up from 0.

Wait for the 38 second pump cycle to end.

```
dosine  1
t 21 0000      oz
```

Step 16

Remove the Chemical Siphon/Level Sensor from the graduated vessel.

View where the chemical line is on the graduated scale. Subtract this level from the original level. This will be the amount of chemical pumped in 38 seconds.

If further adjustments are needed, follow Step 14 and Step 15 until the required chemical quantity is measured.

Step 17

Type the number sequence "2, 5, 0" at the keypad.

Press the ENTER key.

Press the START key.

```
dosine    1
t 21 1725 2.50oz
```

Step 18

Press the STOP key.

```
service level
submenu    v
```

Step 19

Press the LEFT ARROW key two times.

```
select Program
P01 Instrument C
```

Step 20

Open the I3 Washer door. Visually inspect the Wash Chamber for damage. Ensure that all the Filters are in place and free of debris. Verify that the two (2) Wash Spray Arms rotate freely.

Step 21

Inspect the Header for damage and ensure the Header Spray Arms rotate freely.

4-6 System Final Test

The Washer's components have been checked and calibrated. Now the Washer will run programs to test it's operation.

Step 1

Press the C4 key seven times to access Wash Cycle 10 - Rinse Cycle.

```
select Program
P10 Rinse Cycle
```

Step 2

Place enough chemical in the graduated vessel to return to the original level. Place the Chemical Siphon/Level Sensor into the graduated vessel.

Step 3

Press the START key.

The Washer will now automatically proceed through all the steps of the Rinse Cycle. Observe the entire operation for any unusual signs.

NOTE

The cycle can be aborted by pressing the STOP key. The Control Panel Display will show:

```
Error          009
STOP-BUTTON
```

Step 4

When the cycle is finished, the Control Panel Display will show:

```
P10 Rinse Cycle
END
```



WARNING



Avoid contact or inhalation of steam that escapes from the Wash Chamber. Severe burns may occur.

Step 5

Remove the Chemical Siphon/Level Sensor from the graduated vessel.

View where the chemical line is on the graduated scale. Subtract this level from the original level to verify that 2.5 ounces of chemical was pumped by Chemical Pump 1.

Step 6

Place the Chemical Siphon/Level Sensors 1 into the appropriate Chemical Tanks.

Step 7

Press the C1 key to access Wash Cycle 1 - Instrument Cycle.

```
select program
P01 Instru.Cycle
```

Step 8

Locate the Washer Performance Test Packet (F2-010-67) included in the I-Series Performance Kit. Remove its contents and follow the water quality test procedures provided.

Step 9

Press the START key and the cycle will begin.

Step 10

When the cycle is finished, the Control Panel Display will show:

```
P01Instru. Cycle
      END
```

Step 11

Open the Washer door and observe the results of the Washer Performance Test Packet.

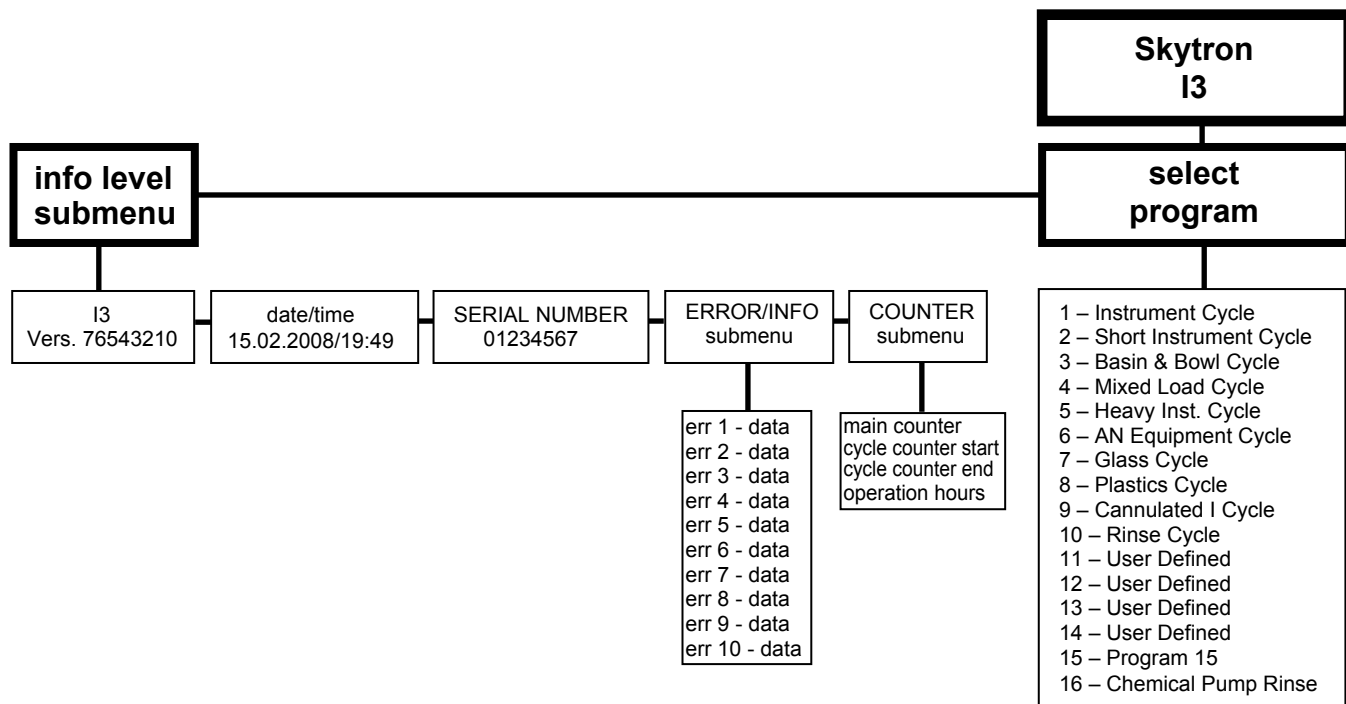
Step 12

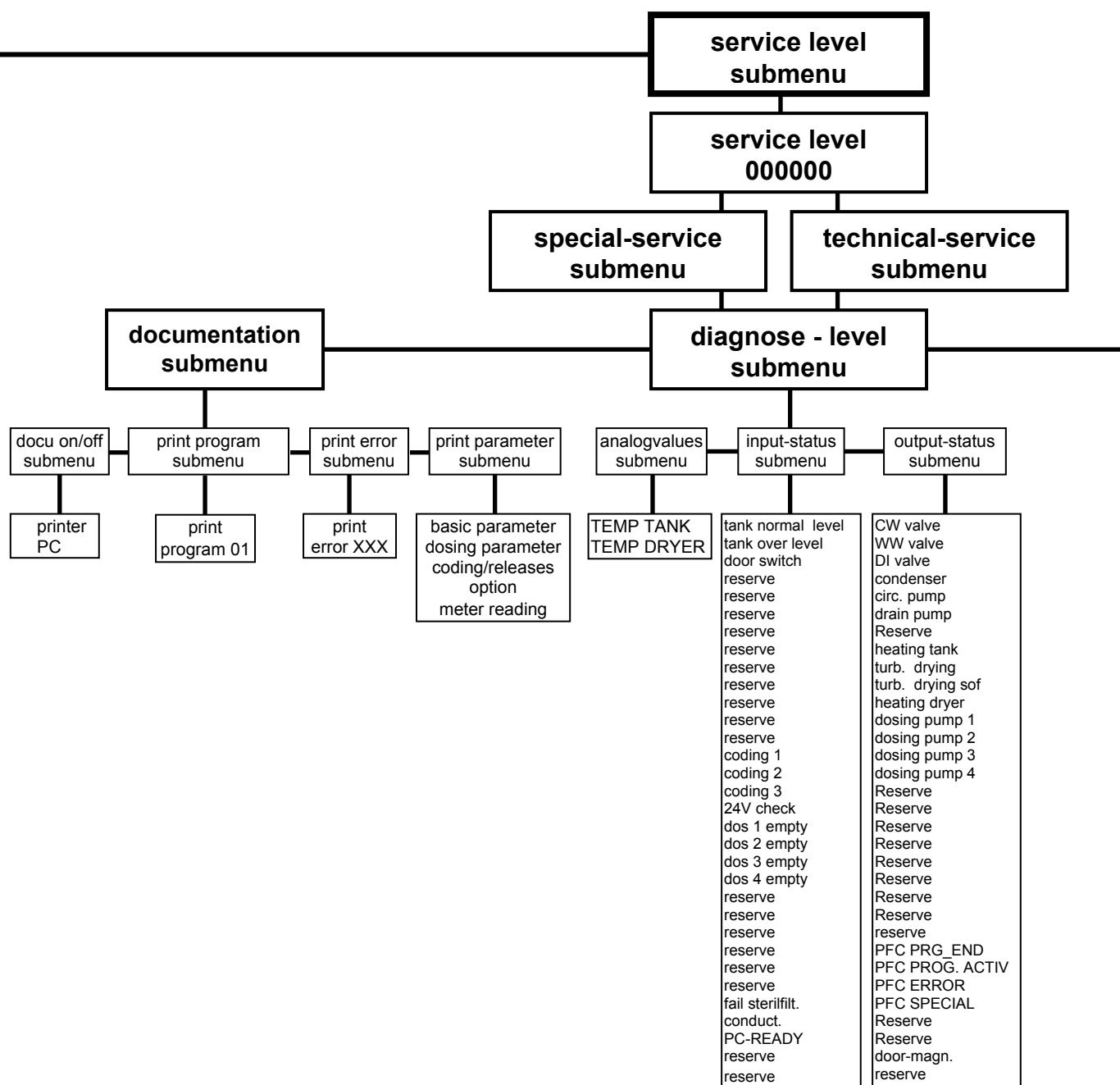
Place the Electrical Main Disconnect Switch into the OFF position.

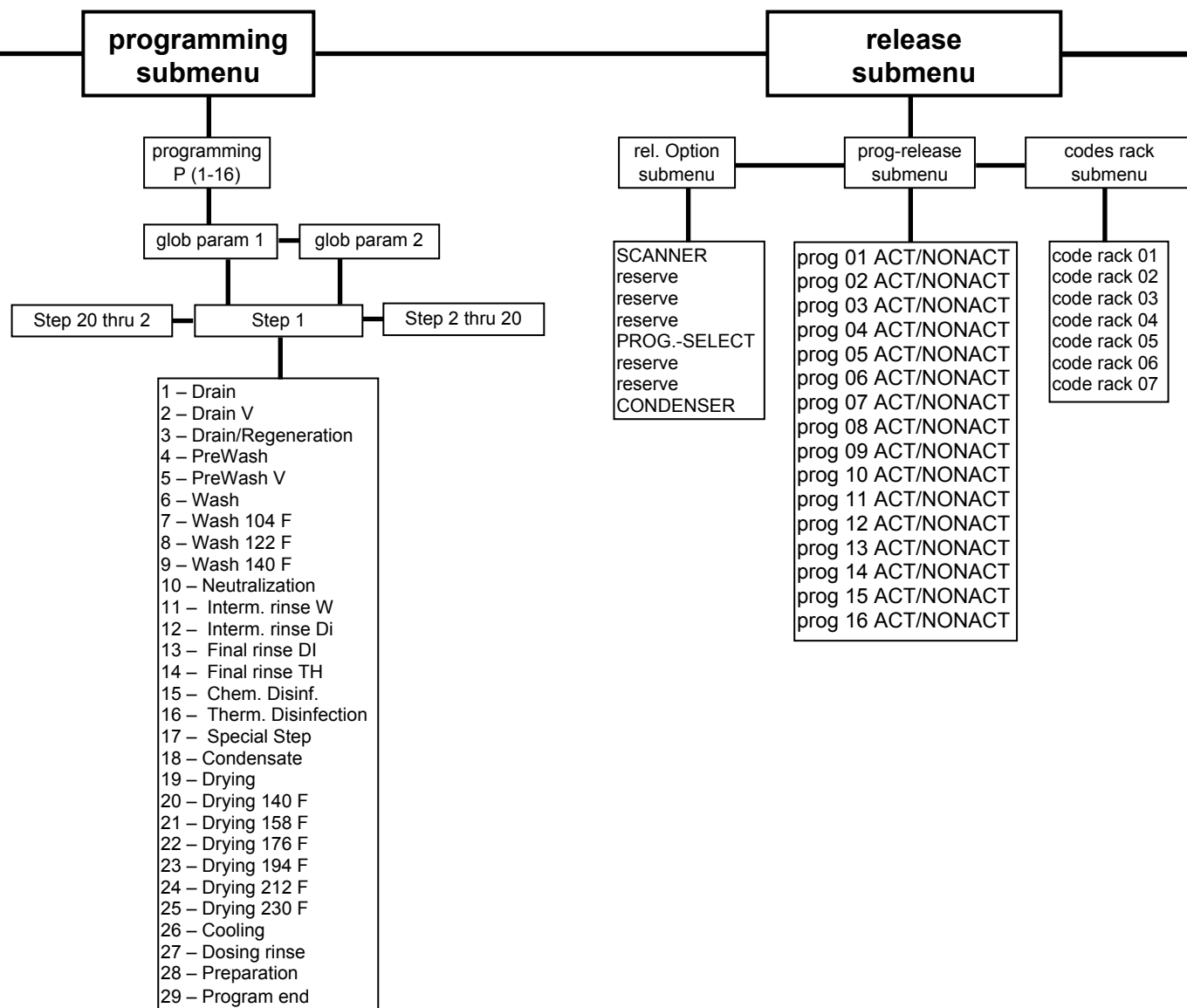
Installation Check List

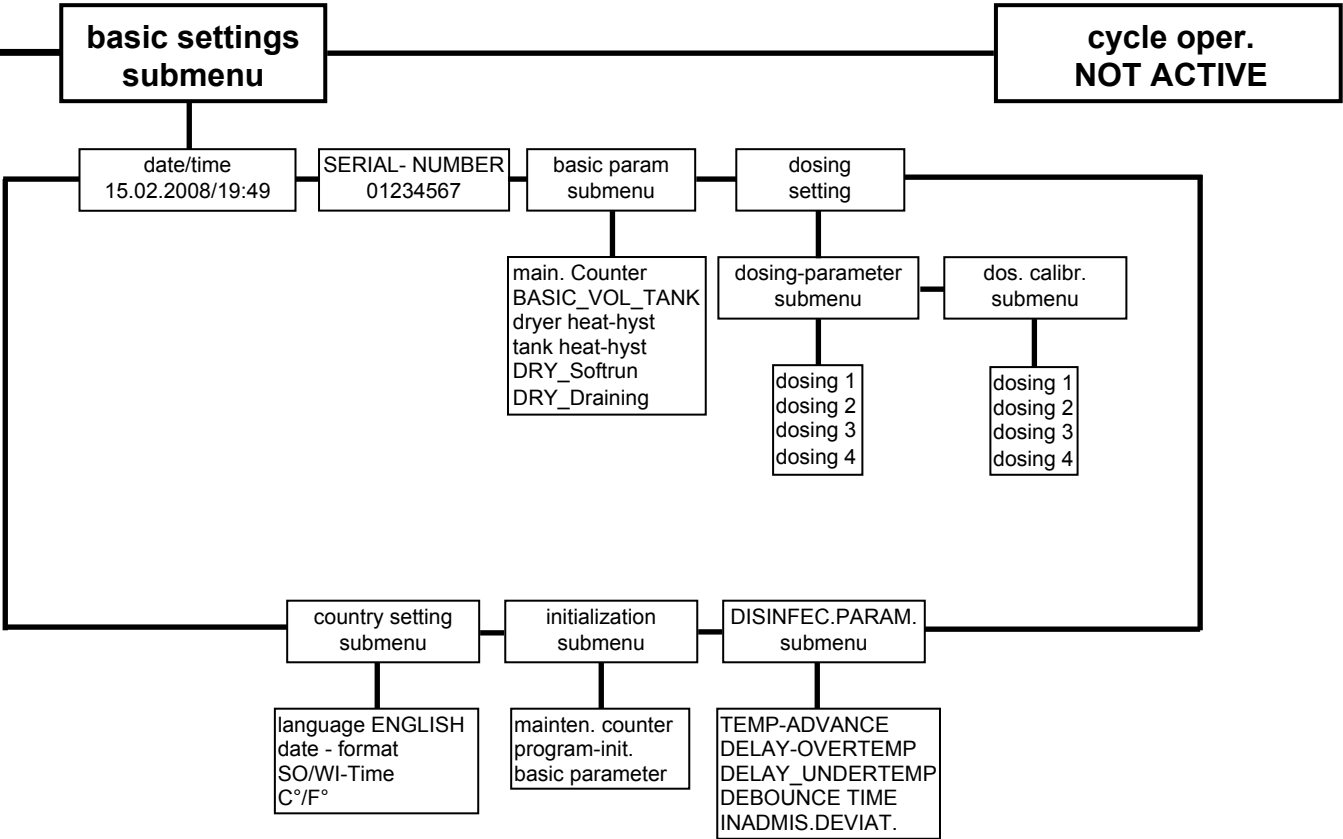
Items to be checked during installation:

Unit leveled at installation.		Check date and item on display. Correct if required.
Water hoses connected with strainers and hose washers.		Chemical pumps primed.
Drain hose connected to the drain and drain capped.		Chemical pumps calibrated.
Electric service hard wired with breaker switch close to unit.		Unit inspected for fluid leaks.
Chemical bottles installed.		All protective film removed. Unit cleaned with stainless steel cleaner.
Unused chemical siphon tubes have the floats locked in the up position.		P1 test cycles run and printout attached to this installation sheet (optional).











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